

Figure 1

200

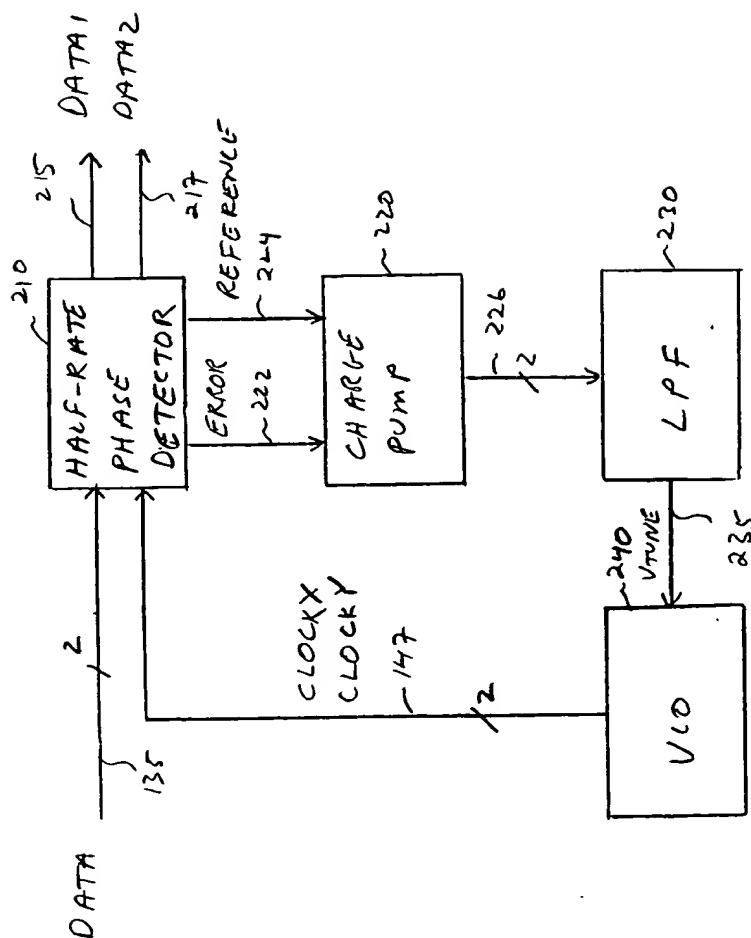
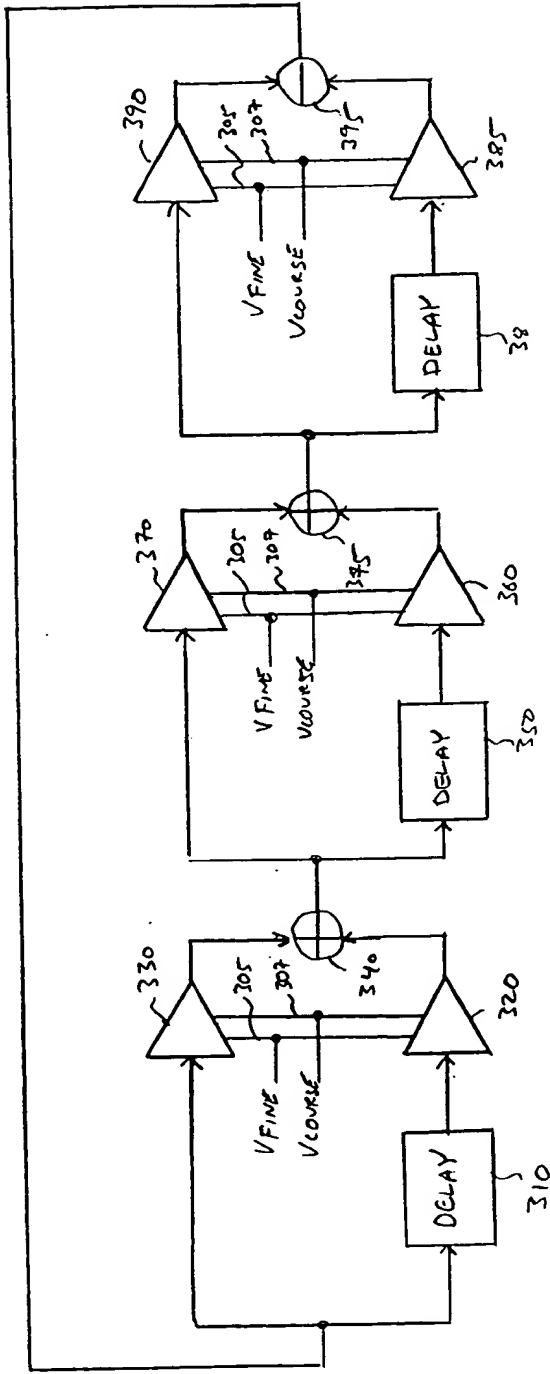


Figure 2



300

FIGURE 3

400

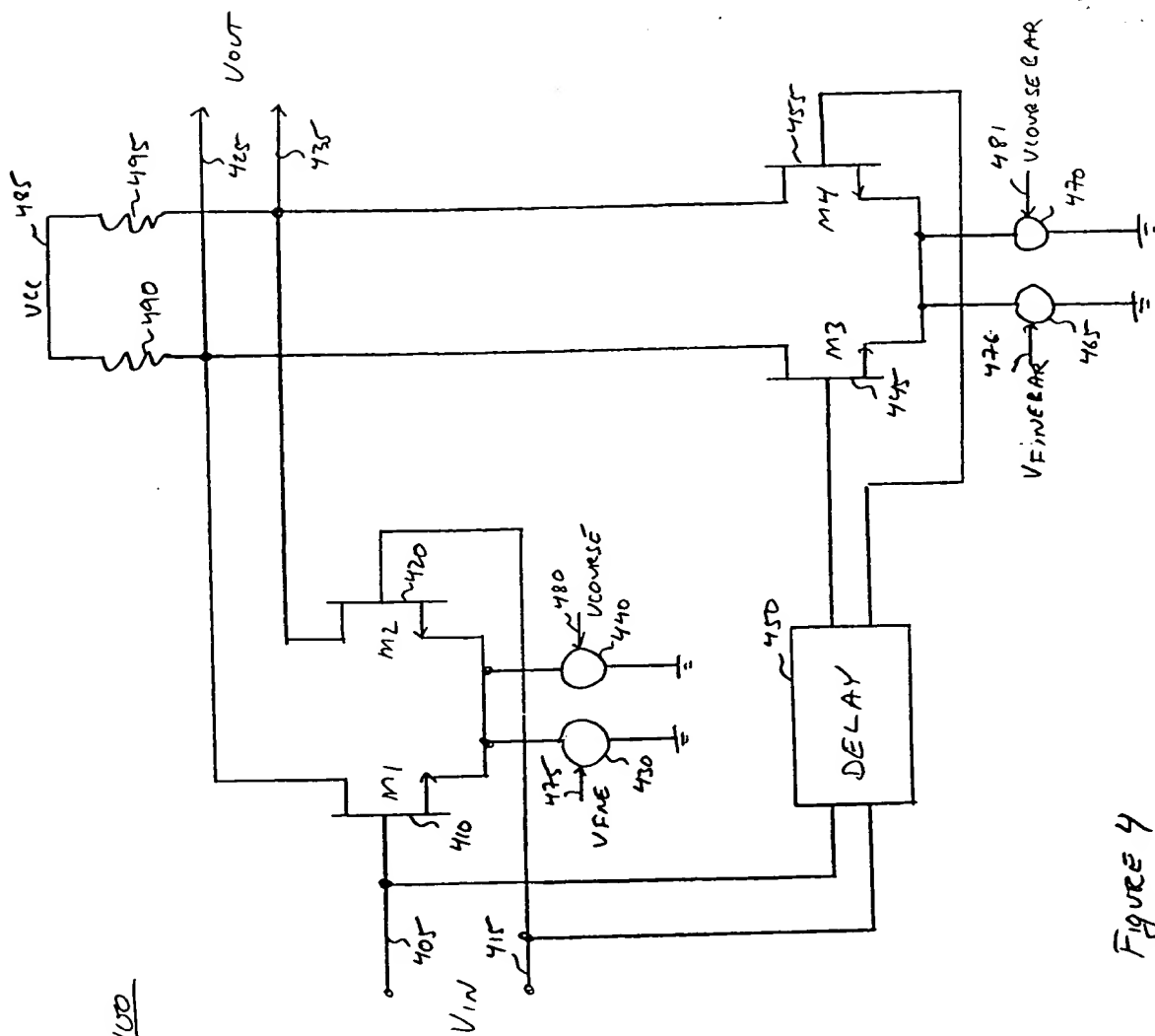


Figure 4

500

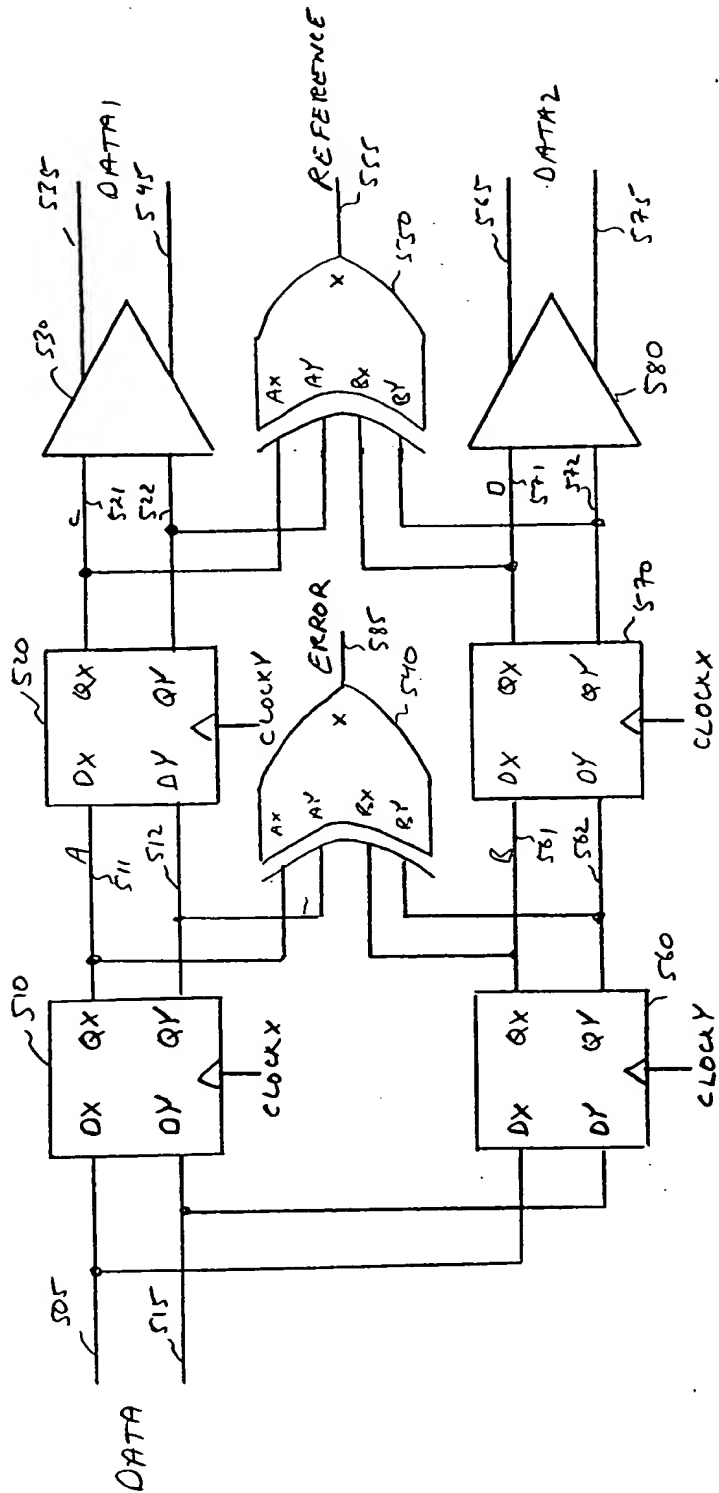


FIGURE 5

TABLE 20-20

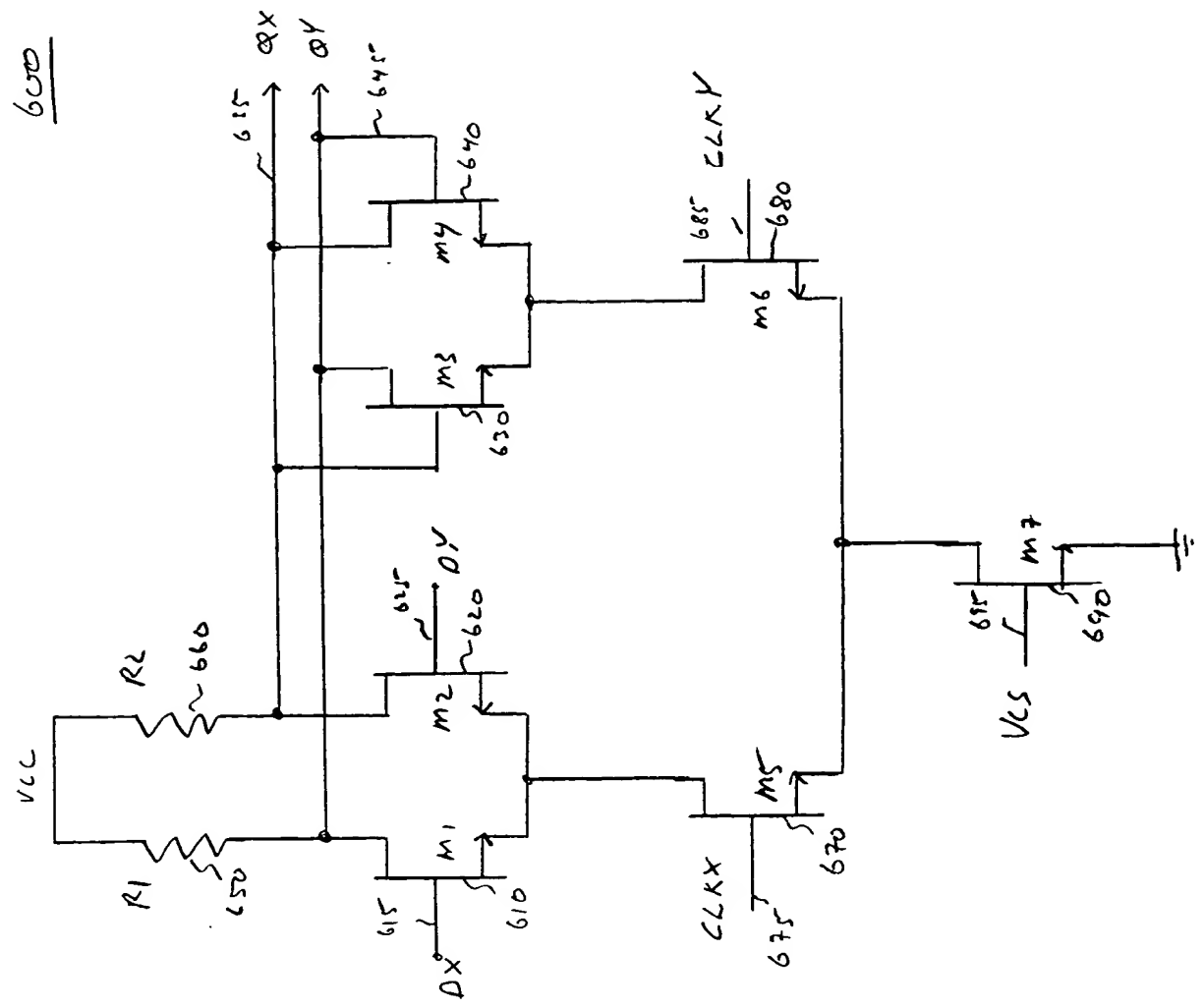


Figure 6

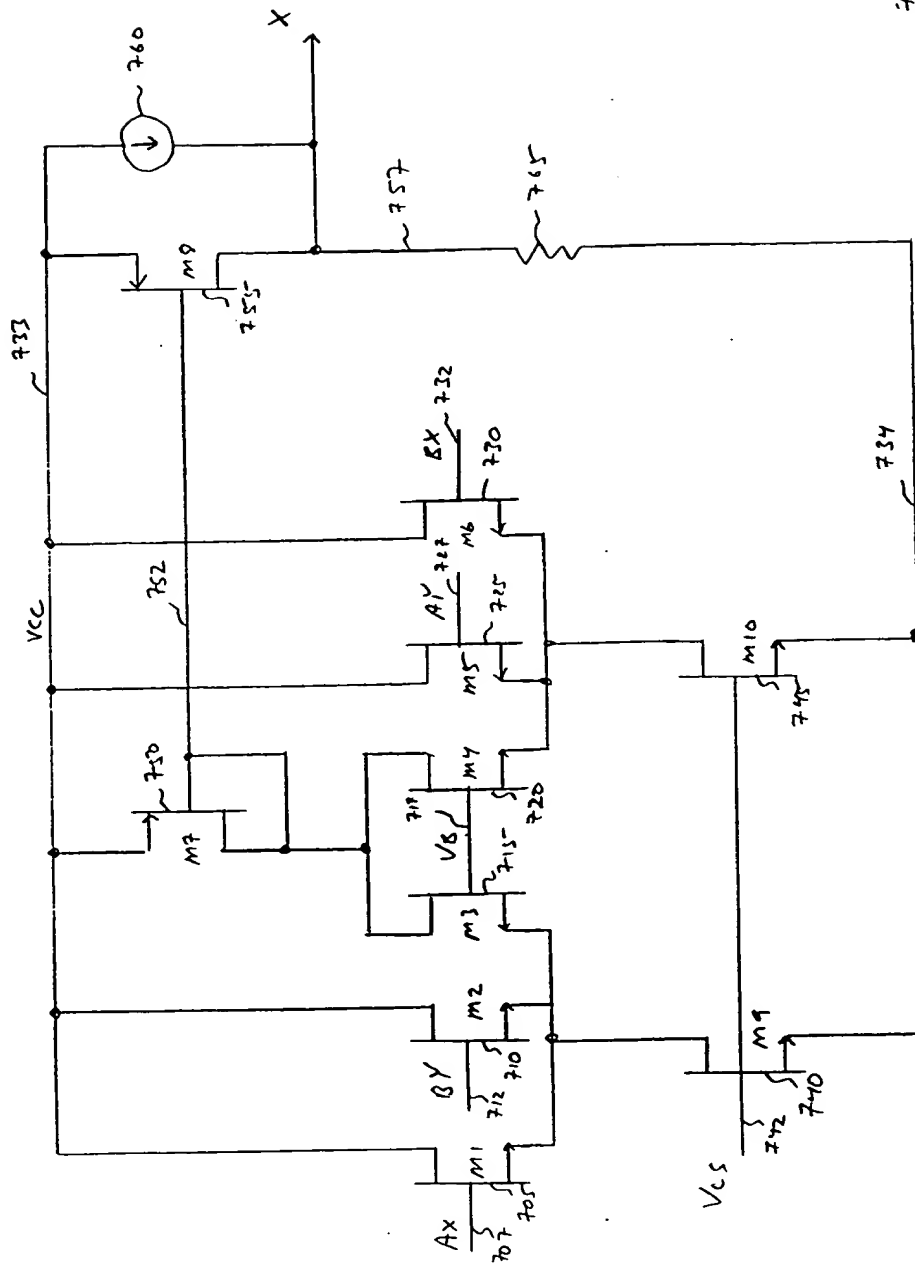


FIGURE 7B

700

A B		A ⊕ B	$\overline{A} \oplus \overline{B}$	$\overline{A} \oplus B$	$\overline{A} \oplus \overline{B}$	$\overline{A} \oplus B$	$\overline{A} \oplus \overline{B}$
0	0	0	1	0	1	0	0
0	1	1	1	0	1	1	1
1	0	1	0	1	0	1	1
1	1	0	0	0	0	0	0

FIGURE 7A

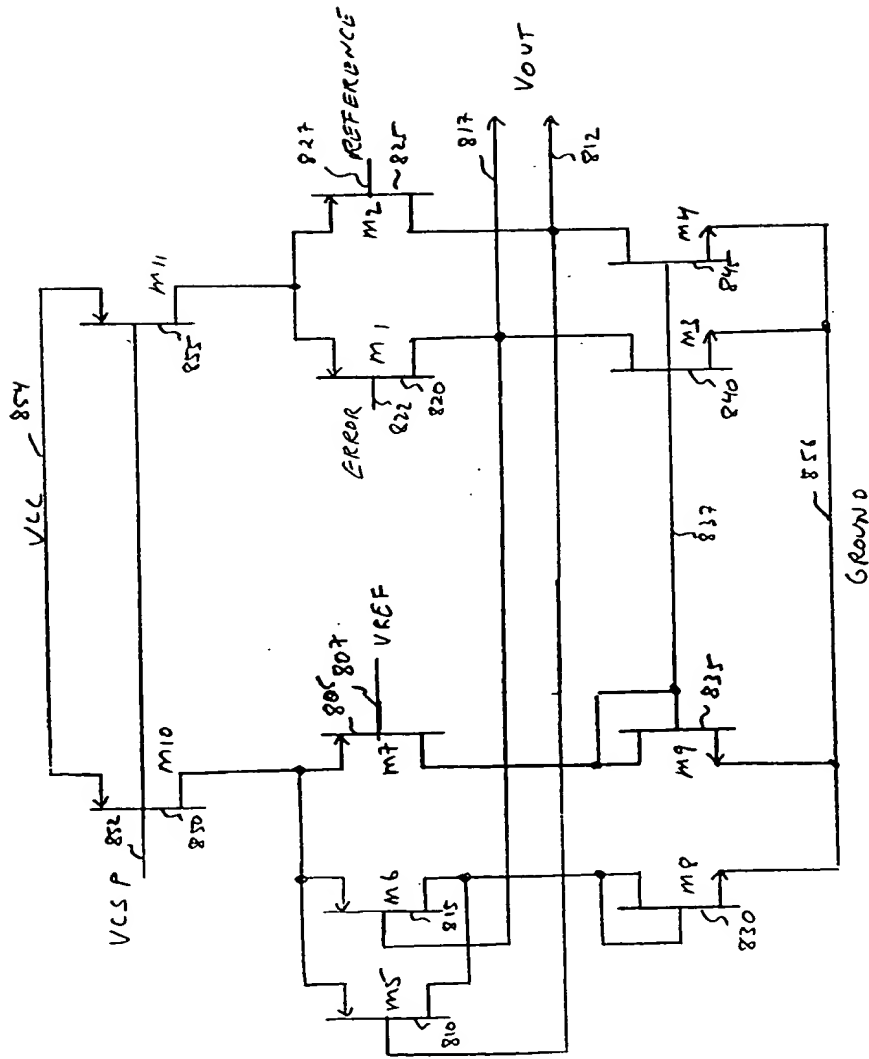


FIGURE 8



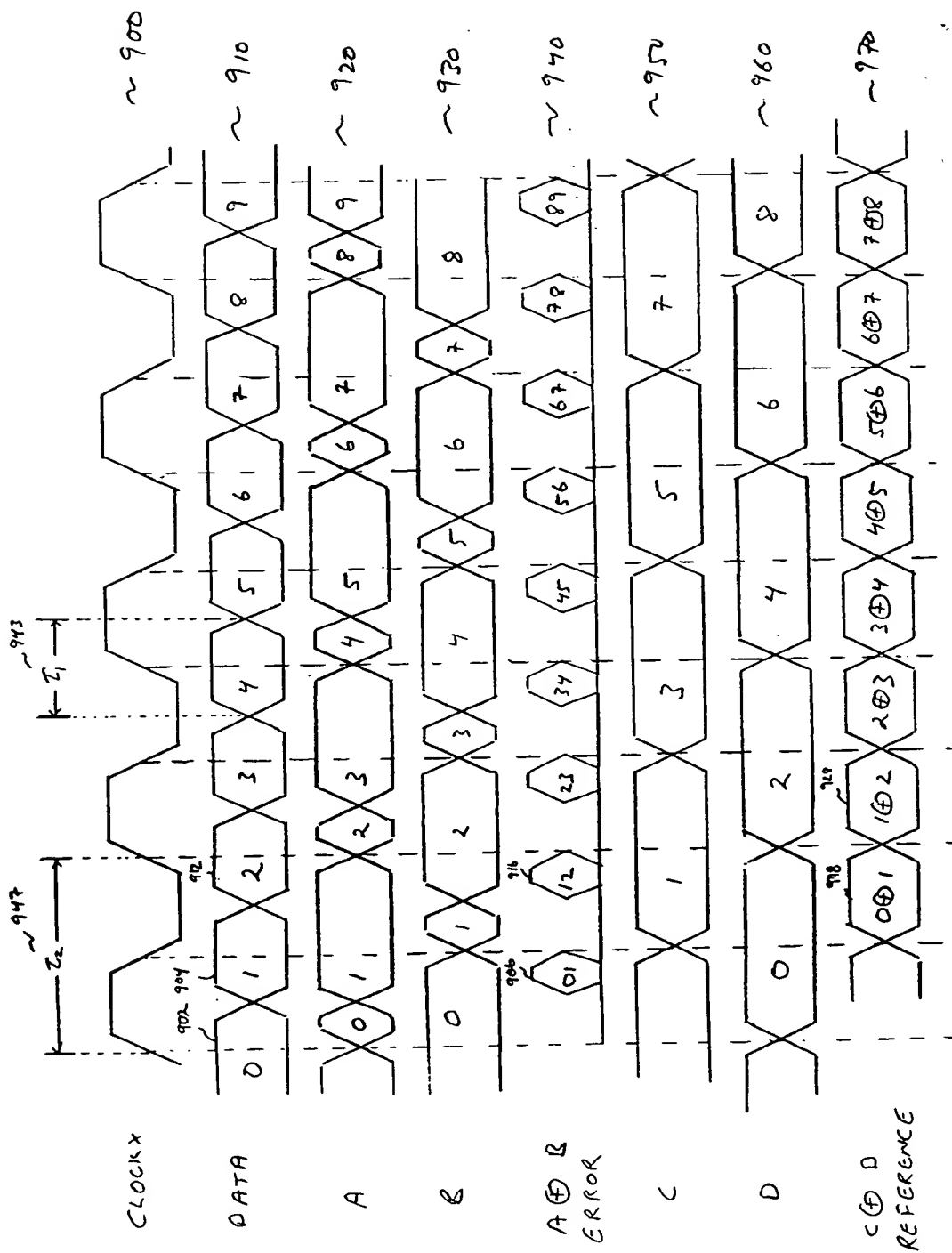


Figure 9

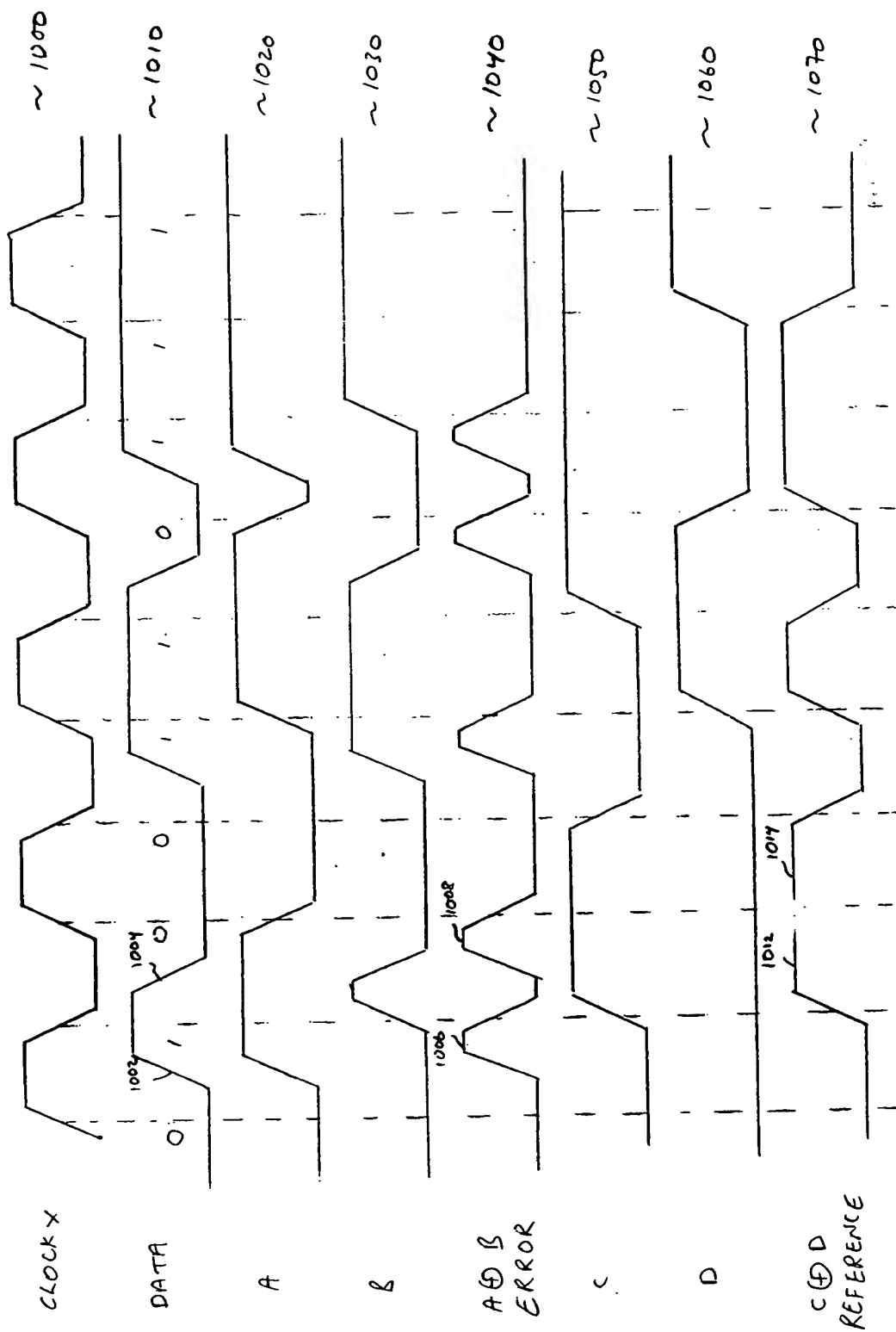


Figure 10

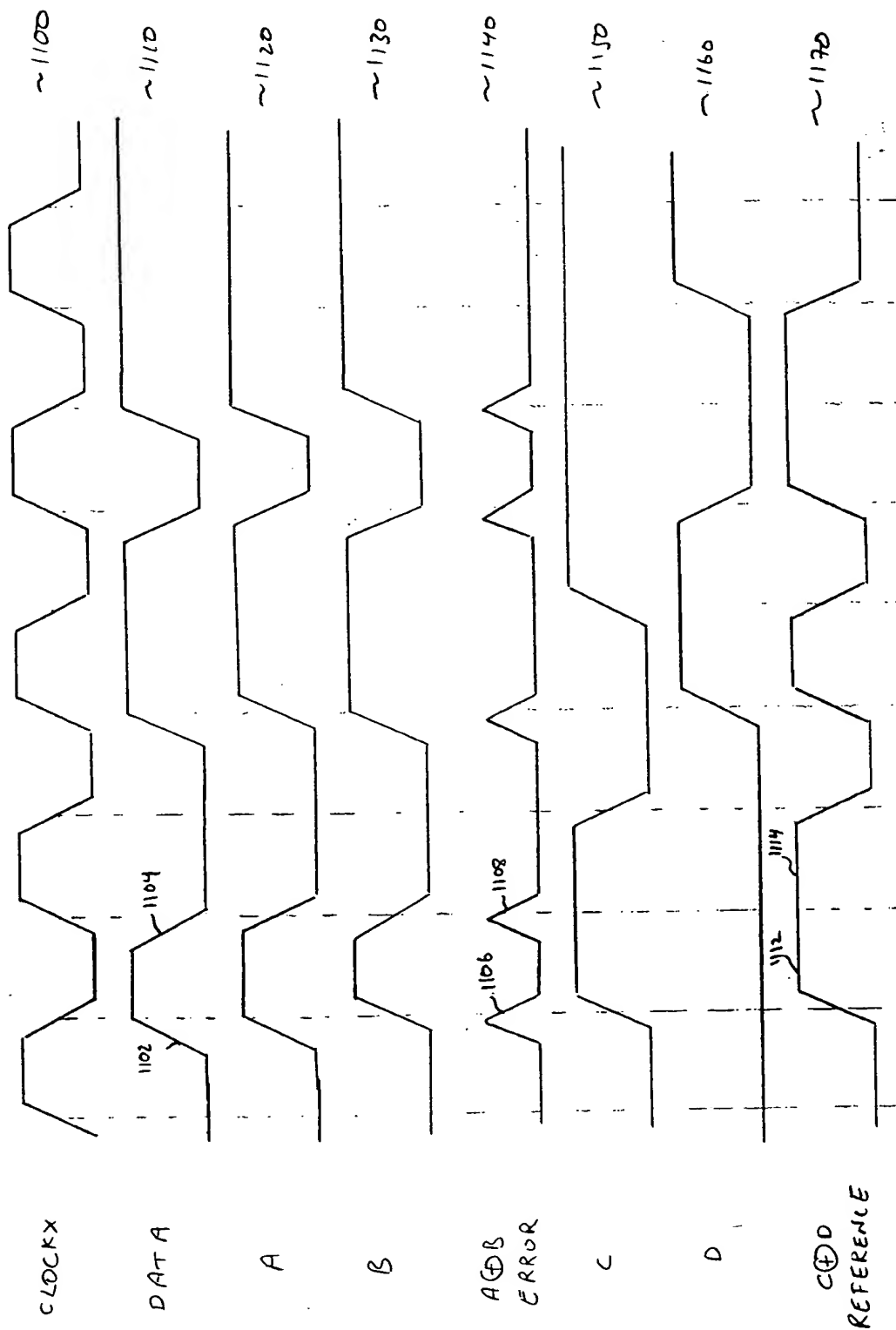


Figure 11

1200

1200

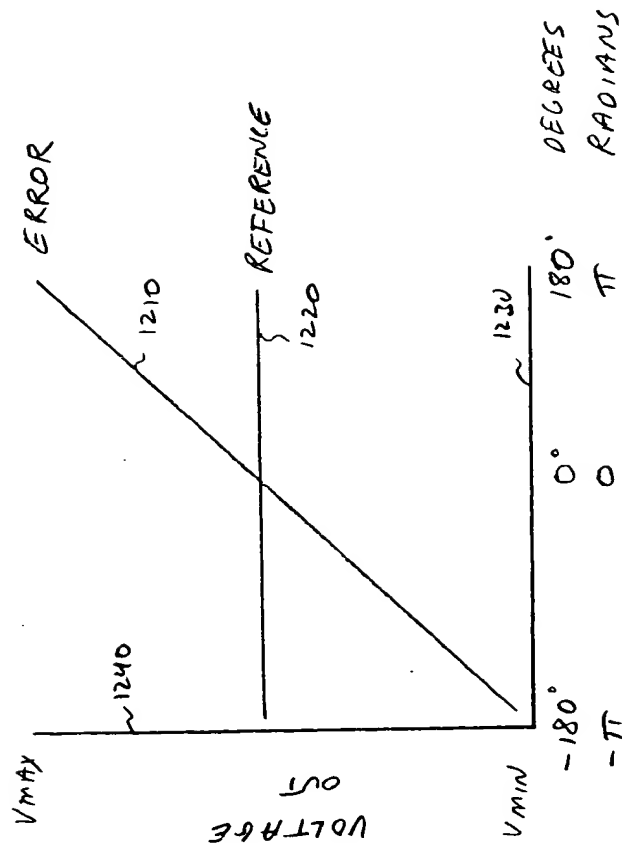


FIGURE 12

1300

PROVIDE AN INPUT DATA SIGNAL, A CLOCK SIGNAL, AND A COMPLEMENTARY CLOCK SIGNAL.

1310

APPLY THE INPUT DATA TO A FIRST LATCH CLOCKED BY THE CLOCK SIGNAL.

1320

APPLY THE INPUT DATA TO A SECOND LATCH CLOCKED BY THE COMPLEMENTARY CLOCK SIGNAL.

1330

APPLY THE OUTPUT OF THE FIRST LATCH TO A FIRST XOR GATE AND A THIRD LATCH.

1340

APPLY THE OUTPUT OF THE SECOND LATCH TO THE FIRST XOR GATE AND A FOURTH LATCH.

1350

APPLY THE OUTPUT OF THE THIRD LATCH AND THE FOURTH LATCH TO A SECOND XOR GATE.

1360

USE THE OUTPUT OF THE FIRST XOR GATE AS AN ERROR SIGNAL, THE OUTPUT OF THE SECOND XOR GATE AS A REFERENCE SIGNAL, THE OUTPUT OF THE THIRD LATCH AS A FIRST DATA OUTPUT, AND THE OUTPUT OF THE FOURTH LATCH AS A SECOND DATA OUTPUT.

1370

SUBTRACT THE ERROR SIGNAL FROM  $\frac{1}{2}$  THE REFERENCE SIGNAL, AND FILTER.

1380

USE FILTER OUTPUT TO ADJUST CLOCK AND COMPLEMENTARY CLOCK SIGNALS.

1390

FIGURE 13